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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|---------------|----------------------|-------------------------|------------------|--|
| 09/777,003 | 02/05/2001 | David Baker | 655-0012c | 5644 | |
| 75 | 90 12/26/2001 | | | | |
| SOFER & HAROUN, L.L.P. Suite 1921 342 Madison Avenue | | | EXAMINER | | |
| | | | NGUYEN, TANH Q | | |
| New York, NY 10173 | | | ART UNIT | PAPER NUMBER | |
| | | | 2182 | 2182 | |
| | | | DATE MAILED: 12/26/2001 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

| Office Action Summary | | Application No. | Applicant(s) | | | |
|---|---|--------------------------------|--|--|--|--|
| | | 09/777,003 | BAKER ET AL. | | | |
| | | Examiner | Art Unit | | | |
| | | Tanh Q. Nguyen | 2182 | | | |
| Period fo | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on <u>05 F</u> | ebruary 2001 . | | | | |
| 2a) <u></u> ☐ | This action is FINAL. 2b)⊠ Thi | s action is non-final. | | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>19-36</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>19-36</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8)[| Claim(s) are subject to restriction and/or | election requirement. | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ T | he drawing(s) filed on <u>05 February 2001</u> is/are: | a)⊠ accepted or b) objected to | by the Examiner. | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12)☐ The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority u | nder 35 U.S.C. §§ 119 and 120 | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | |
| ; | 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| 2) 🔲 Notice | of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal P | (PTO-413) Paper No(s) atent Application (PTO-152) | | | |
| | | | | | | |

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DETAILED ACTION

1. Claims 19-36 remains in the application.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 19-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reader et al. (U. S. Pat. No. 6,192,073) in view of Kusters (U. S. Pat. No. 5,519,112).
- 4. <u>As per claim 19</u>, **Reader et al.** (Reader) teaches an integrated multimedia system [100, FIG. 1] having a multimedia processor [110, FIG.1/FIG.2] disposed in an integrated circuit, said system comprising:

a first host processor system coupled to said multimedia processor (col. 3, lines 25-26);

a second local processor [210, FIG.2] disposed within said multimedia processor for controlling the operation of said multimedia processor (col. 5, lines 1-3);

a data transfer switch [230, FIG. 2] disposed within said multimedia processor and coupled to said second processor for transferring data to various modules [220, 242, 243, 245, 248, 252, 255, 258, 290, FIG.2] of said multimedia processor;

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a data streamer [245, FIGs. 2 and FIG. 3] coupled to said data transfer switch, and configured to schedule simultaneous data transfers among a plurality of modules disposed within said multimedia processor in accordance with corresponding channel allocations (col. 4, lines 34-49; 8 channels, FIGs. 52;);

an interface unit [FBUS INTERFACE BLOCK, ASIC GLUE LOGIC AND DMA CONTROLLER, FIG. 52; MULTIMEDIA LIBRARY MODULE, FIG. 7] coupled to said data streamer [WDM Streaming Media, FIG. 7] having a plurality of I/O device driver units [MULTIMEDIA LIBRARY MODULE (MPEG, MODEM, AUDIO,...), FIG. 7]; and a plurality of external I/O devices [KS0122, KS0119, AD1843, FIGs. 6 and 52] coupled to said multimedia processor.

Reader does not teach a multiplexer coupled to the interface for providing access between a selected number of I/O device driver units to external I/O devices via output pins.

Kusters teaches a method that uses a multiplexer [30, FIG. 1] coupled to a computer system [8, FIG.1] for providing access between a selected number of I/O device driver units [38a,..,38n, FIG.1] and external I/O devices [32a,..,32n] via output pins (parallel I/O port, Abstract).

Kusters further teaches the above method not being limited to any particular computer, single chip processor or apparatus; and also teaches a specialized apparatus to perform the methods above (col. 8, lines 4-14). Kusters, therefore, teaches a multiplexer being usable with a single chip processor; such multiplexer being either on the same chip as the processor, or external to the processor.

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Kusters, therefore, teaches the claimed invention except for the particulars of the single chip processor, and except for a first host processor system coupled to the single chip processor.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to coupled Kusters' multiplexer to Reader's multimedia processor interface unit (such multiplexer being either internally or externally disposed on the multimedia processor) for the purpose of providing access between a selected number of I/O device driver units among a plurality of I/O device driver units to external devices via a limited number of output pins, such combination also enabling multiple devices to be used simultaneously for a same set of pins.

5. As per claims 20-25 and 27, Kusters teaches external I/O devices being controlled by a corresponding one of the I/O device driver units (Abstract: lines 11-12).

Reader teaches one of the external devices being a video decoder [Video A/D: Video Out, FIGs. 4, 5] and one the external devices being a video encoder [Video A/D: Video In, FIGs. 4, 5], with NTSC encoder/decoder being well known in the art at the time the invention was made for video encoders and decoders;

one of the external devices being a modem [MSP, FIG. 7]; with a transport channel interface being well known in the art at the time the invention was made for modems; and

three dimensional graphic signal [DirectX (3D), FIG. 7]; and an audio CODEC [114, FIG. 1].

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6. As per claim 26, the combination above does not teach one of the external devices being an ISDN interface. It would have been obvious to one of ordinary skill in the art at the time the invention was made that ISDN represents one of the design choices for an external I/O device for the purpose of communicating data between the multimedia processor and other communications media.

- 7. As per claims 28-36, see the rejections to claims 19-27 above.
- 8. Claims 19-36 are alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over **Reader et al. (U. S. Pat. No. 6,192,073)** in view of **Kim (U. S. Pat. No. 5,926,187)**. The rejections to claims 19-36 above are incorporated by reference.
- 9. <u>As per claim 19</u>, Kim teaches a multiplexer [515, FIG. 5] coupled to the interface unit [251, FIG. 1] for providing access between a selected number of I/O device driver units (col. 6, line 30-col. 7, line 8) to external I/O devices [110, 130, 150, FIG. 1] via output pins (col. 6, lines 10-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kim and Reader because they are both directed to the same multimedia processor, with each of the references claiming a different aspect of the same multimedia processor, and because Kim's aforementioned teachings would allow the multiplexer to implement protocol for accessing different devices.

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10. As per claims 20-36, Kim further teaches external I/O devices being controlled by a corresponding one of said I/O device driver units (col. 6, line 30-col. 7, line 8); one of the external devices being a NTSC decoder [col. 3, lines 7-8; 110, FIG. 1] and one the external devices being a NTSC encoder [col. 3, lines 7-8, 130, FIG. 1]; one of the external devices being an audio CODEC [150, FIG.1]; modem communications (col. 3. line 11) and modem software to demodulate data (col. 3, lines 45-47).

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, In re Thorington. 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 19-36 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 09/172,286. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of the claims in the instant application are fully disclosed in claims 1-18 of the copending application.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanh Quang Nguyen whose telephone number is (703) 305-0138, and whose e-mail address is tanh.nguyen36@uspto.gov. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee, can be reached on (703) 305-9717. The fax phone number intended for entry for the organization where this application or proceeding is assigned is (703) 746-7238 for after final, (703) 746-7239 for formal communications, (703) 746-

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7240 for Customer Service, or (703) 746-5672 for informal or draft communications.

Any inquiry of a general nature relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Mail responses to this action should be sent to:

Commissioner of Patents and Trademarks

Washington, D. C. 20231

Hand-delivered responses should be brought to:

Crystal Park II, 2121 Crystal Drive, Arlington, Va, Sixth Floor (Receptionist).

THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

TQN

December 14, 2001